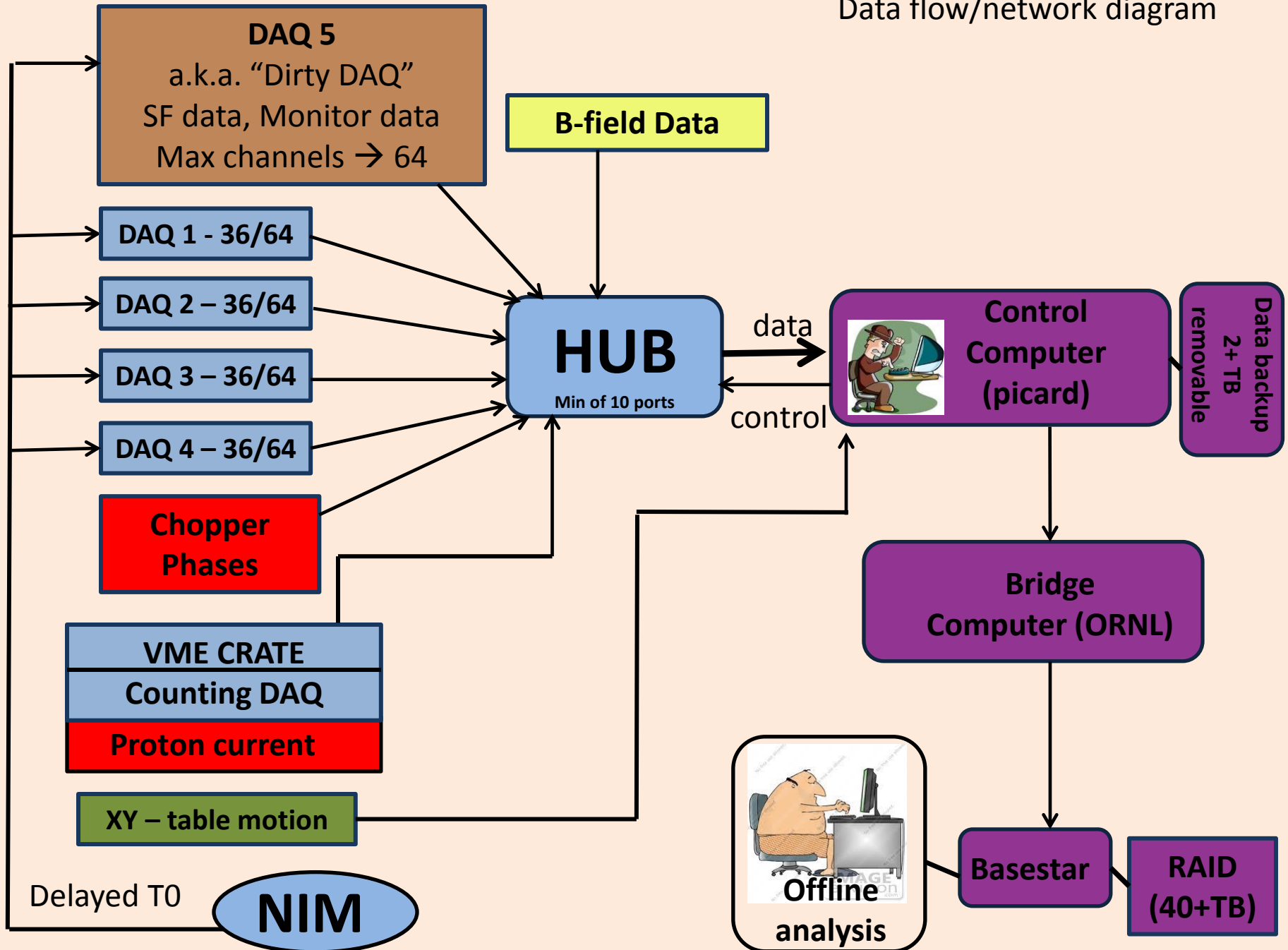
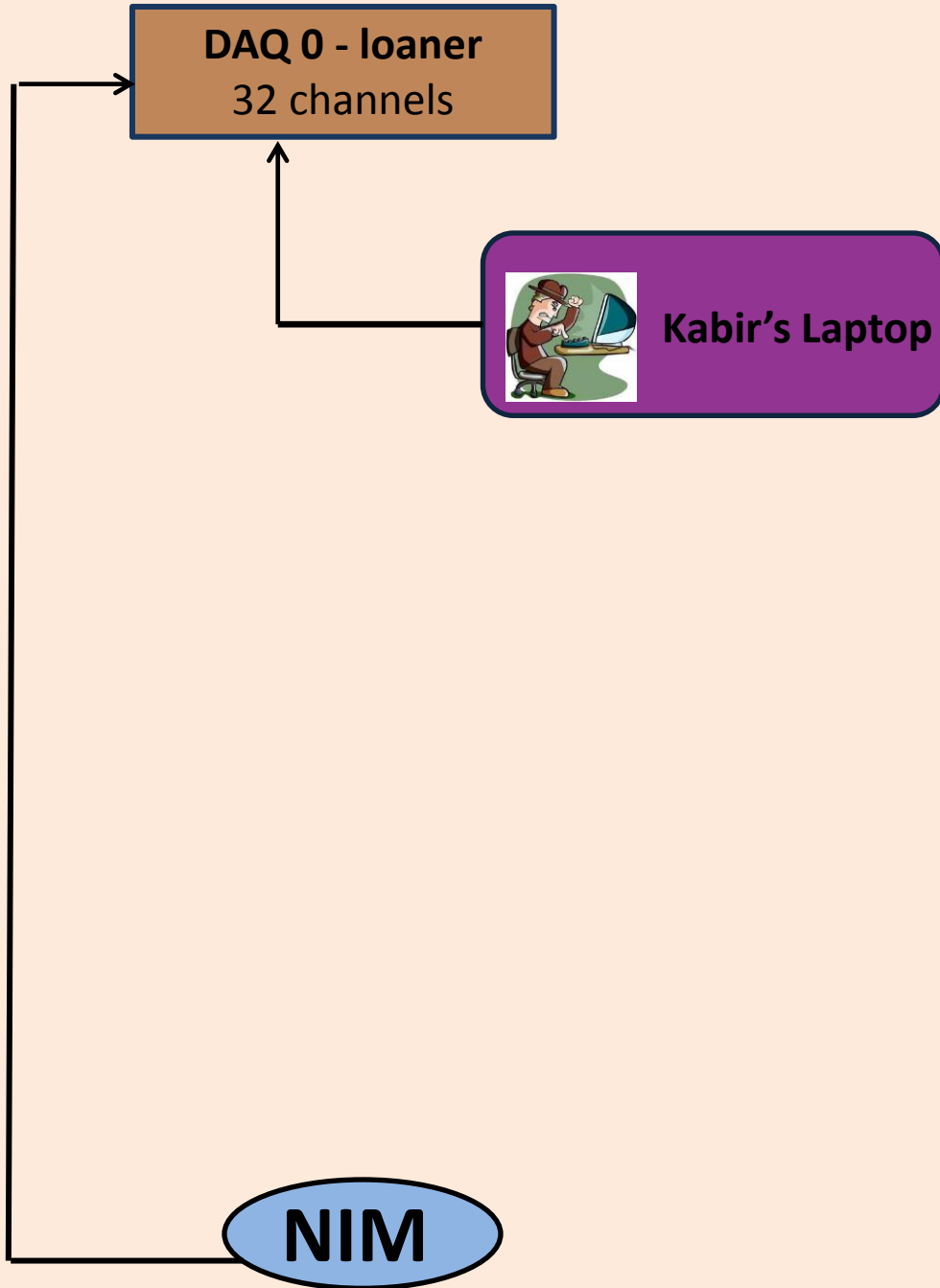


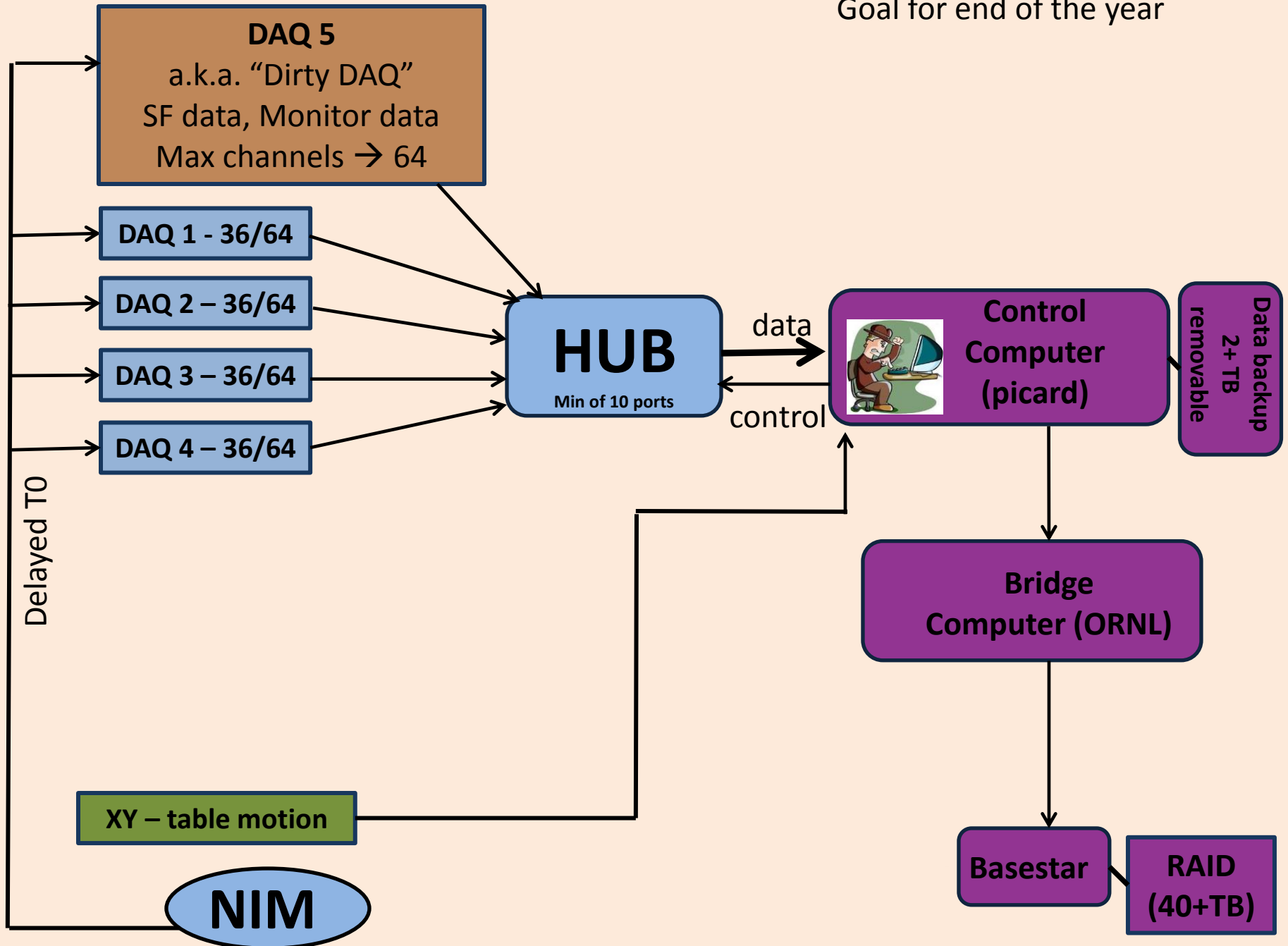
Data flow/network diagram



What we have now



Goal for end of the year



Goals from 11/07/2013 for 11/20/2013

- 1) Get and configure Picard → **ON TRACK**
- 2) Define and implement data structure for “clean” modules → **ON TRACK**
- 3) Minimal GUI to take data and write runlist file → **volunteer?**
- 4) Library to read data from “clean” modules → **Nadia**
- 5) Headers written (Chris, is this doable quickly?)

Other Short-Term issues to resolve/organize

For Picard/Interface:

- Configure computer (fancy private network, etc)
- GUI to automate data taking
- Copy runs to RAID (when it exists)
- PULL information from all sources (that exist)
- Expert/shift-taker mode
- Runlist organization
- Update root Tree and library
- Automated elog entries? (for each run)
- Remote elog capabilities
- Data reduction for quick analysis

Triggering:

Does module have Digital I/O – if yes, use that from all DAQ modules ANDed with T0.

Data transfer from DAQ

Do we need ethernet/fiber?

DAQ 1-4

- 10 kHz clock rate
- 100 us between samples
- 4 samples/tbin
- 0.4 ms tbins
- 16.4 ms of data

Spin Sequence

Why not use old sequencer?
Puts out a TTL signal (or nothing)

- Version control → computer; basestar
- RAID plan
- Elog on bsg
- Document server
- Board – trace bad channel (x36) and other boards
- ethernet – fiber hubs (kabit)
- Fiber ethernet computer card
- Ground diagram
- 24 bits, 10 bits of noise
- Schemes for data compression